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| Protozoa | Disease caused | Vector? | Classification | Motile? | Intracell. stage | Cysts? | Distribution | Main symptoms | Organ systems affected? | Most common diagnostic tools | Most common treatment | | |
| *Plasmodium sp.* | vivax malaria | Anopheles mosquito | Sporozoan: apicomplexa | NO | Yes | No | PfEMP1-adheison  duffy antigen (vivax)  -vivax relapse  -falciparum no relapse | - anemia, renal failure, cerebral/placental malaria  -falciparum most common cause of malarial death | Systemic infection (blood and tissue) | -multiple ring  -single ring/schuffner dots |  | | |
| falciparum malaria |
| ovale malaria |
| malariae malaria |
| *Leishmania sp.* | visceral leishmaniasis (L. donovani; infantum) | Sandfly | Flagellated | Yes | Yes .amastigote | No | -Only in L. donovani and infantum | -opportunistic in AIDS, enalrged, lymph, spleen and liver | Systemic infection (blood and tissue) | -amastigotes in biopsy |  | | |
| cutaneous leishmaniasis | -Iran, Syria, Afghanistan | -red papule at bite, skin disfiguring |  |  | | |
| mucocutaneous lesihmaniasis (L. brazilensis) | -L. braziliensis | -destruction of mucosa and underlying structures |  |  | | |
| *Trypanosoma sp.* | African T.  (T. brucei gambiense) | Tsetse flies) | Flagellated  -Chancre  -hemolymphatic stage  -Meningo-encephalitic stage | Yes | No | No | -West Africa  Sleeping sickness | -Winterbottom sign  -CNS involvement  .hemiplagia, lethargy, coma and death | Systemic infection (blood and tissue) | -extracellular flagellated protozoa; much larger than RBC |  | | |
| African T.  (T. brucei rhodesiense) | -East Africa, ↑ virulent and shorter incubation | -rapidly fatal  -CNS invasion occurs early in infection | -antigenic VSG🡪evades Ab response |  | | |
| American T. (Chagas’ disease)  T. cruzi | Reduviid /kissing bug | Flagellated | Yes | Yes .amastigote | No | -obligate intracellular, zoonotic | -Romania’s sign  -chronic🡪  myocarditis, enlarged esophagus, may involve CNS | Systemic infection (blood and tissue) | -amastigote in blood in acute stage  -in chronic stage, hard to find in blood and need to biopsy | -drugs only effective for acute stage | | |
| Protozoa | **Disease caused** | **Vector?** | **Classification** | **Motile?** | **Intracell. stage** | **Cysts?** | **Distribution** | **Main symptoms** | **Organ systems affected?** | **Most common diagnostic tools** | **Most common treatment** | | |
| *Toxoplasma gondii* | Toxoplasmosis | No | Sporozoan: apicomplexa | NO | Yes | Yes .cysts & oocysts | -ingestion of food/water contaminated with mature oocysts from cat feces  -a leading cause of food-borne illness and death | -serious if congenital  -serious in immunocompromised; most common cause of encephalitis in AIDS (cyst rupture🡪encephalitis🡪ring enhancing lesions) | -Systemic infection  (blood and tissue; mostly brain; focal encephalopathy) | -serology | | Pyrimethamine | |
| *Giardia intestinalis (lamblia)* | Giardiasis | No | flagellated | Yes | No | Yes | -fecal-oral (zoonosis) | -foul-smelling, watery sometime fatty diarrhea  -IgA deficient are susceptible | GI infection | -detection of parasite in feces | | | Metronidazole |
| *Cryptosporidium sp.* | Cryptosporidiosis | No | Sporozoan; apicomplexa | NO | Yes  .infects enterocyte | Yes .oocysts | -fecal-oral consumption of oocysts from contaminated water  - cattle (Zoonosis) | -generally self-limiting, watery diarrhea, but much more severe in AIDS; summer months | GI infection | -detection of oocysts in feces | | | Supportive |
| *Entamoeba histolytica* | Amebic dysentery | No | Amoebozoa | Yes | No | Yes | -fecal-oral  -NOT zoonosis  -developing countries (India)  -ulcerative | - dysentery (bloody) diarrhea, can spread to other organs and be fatal  -liver abscess, colitis | GI infection and also spreads to colon and liver | -detection of parasite in feces  -cysts are the infective and transmissive form | | | Metronidazole | |
| *Trichomonas vaginalis* | Trichomoniasis | No | flagellated | Yes | No | No | -direct contact or during sexual intercourse  -NOT zoonosis  -leading cause of infertility, preterm labor and low birth weight | -mild vaginits or urethritis  -never fatal  -yellow/frothy discharge | Urogenital tract, vagina, urethra, prostate, epididymis | -detection of parasite from vagina, urethral or prostatic secretions  -trophozite, flagellated, NO cysts, ONLY motile, flagellated organism found in vagina/urethral discharge (wet mounts) | | | Metronidazole | |